



White-Nose Syndrome of Bats

The National Park Service (NPS) preserves, protects, and shares the legacies of treasured resources set aside by the American people as the national park system. In meeting this mission, the NPS exercises its mandate for wildlife management in NPS units. White-nose syndrome (WNS) is threatening bat conservation as well as visitor use of some recreational caves and enjoyment of bats in NPS units.

What is at risk from WNS?

NPS manages 84 million acres in more than 400 units. Nearly 1 in 4 NPS units have caves, and 1 in 3 contain mines that can provide habitat for bats and other organisms.

Nation-wide about 50 species of bats occur in NPS units, including 7 species that are Federally listed as threatened or endangered, and numerous other species that are State listed. Bats have important ecosystem functions including roles as insect-eaters, pollinators, and seed dispersers, as well as serving as prey themselves.

In states where WNS has been detected to date, NPS units are home to

numerous species of insect-eating bats, including 4 species that are endangered. WNS or *Pseudogymnoascus* (formerly *Geomyces*) *destructans*, the causative agent of WNS, have now been found in or immediately adjacent to 11 NPS units:

- Acadia National Park, ME
- Chesapeake and Ohio Canal National Historical Park, MD
- Chickamauga and Chattanooga National Military Park, TN, GA
- Cumberland Gap National Historical Park, VA
- Delaware Water Gap National Recreation Area, PA, NJ
- Great Smoky Mountains National Park, TN, NC
- Mammoth Cave National Park, KY
- New River Gorge National River,

WV

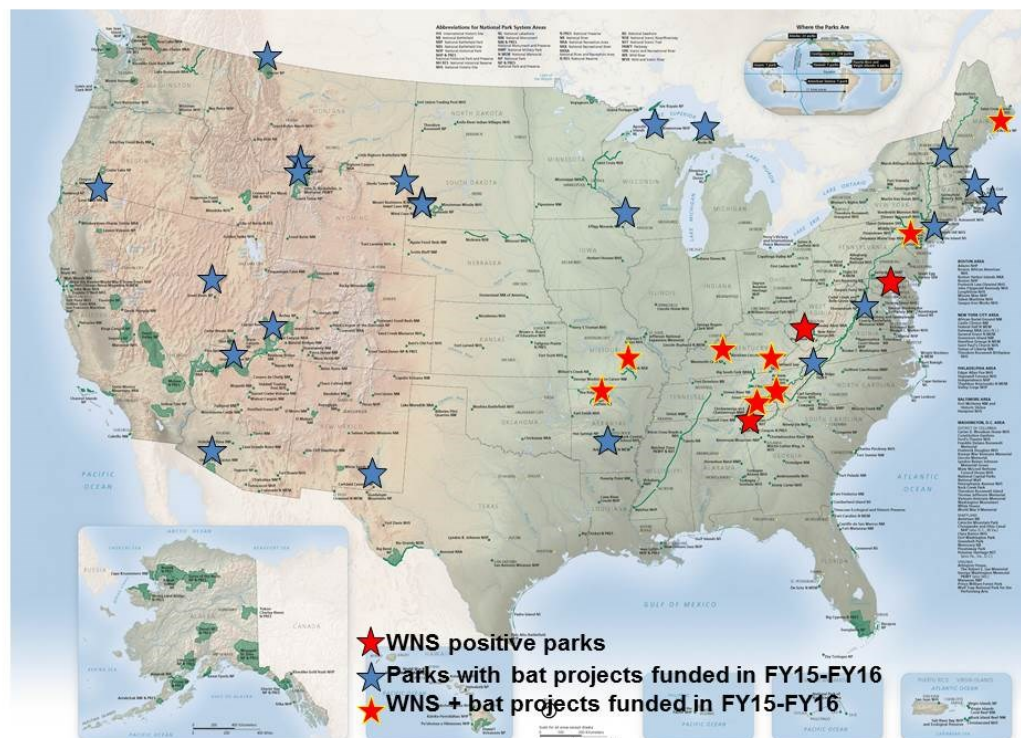
- Ozark National Scenic Riverways, MO
- Russell Cave National Monument, AL
- Buffalo National River, AR

The number of parks experiencing the effects of WNS is likely much higher. Losing an important predator so quickly may have far-reaching consequences. As the disease spreads, the impact and potential for impact on national parks is considered very high.

NPS units welcome more than 270 million visitors per year. Caves are the primary attraction at some national parks, such as Mammoth Cave and Carlsbad Caverns, and wild caves are a secondary attraction at numerous NPS units.

How is NPS addressing WNS?

- Parks with cave resources are updating their Cave Management Plans or using other means to identify and implement actions that minimize the risk of *P. destructans* spreading *into* uninfected parks and *from* infected parks. These actions include providing extensive WNS education materials; screening visitors and gear; disinfection; and, when necessary, closure of cave resources.





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- Access to all NPS caves is restricted to those who hold appropriate permits or tour tickets. Show caves such as those located in Cumberland Gap National Historic Park, Jewel Cave National Monument, Mammoth Cave National Park, Timpanogos National Monument remain open with precautions in place.
- The NPS Abandoned Mineral Lands Program requires all inspectors, surveyors, and contractors to use new gear or to disinfect gear protocols prior to working in NPS mines.
- NPS wildlife veterinarians are providing service-wide coordination on WNS surveillance and management, and partnering with other Federal and State agencies in national coordination efforts.
- Since 2013, researchers in parks have undertaken projects to learn more about WNS and bats in national parks. More than 153 projects in 78 parks have received funding to study WNS. Some of the accomplishments include studies of park-specific bat species distributions and habitat use. Other projects focus on protecting bats, either through visitor screening and decontamination or installing bat gates or cupolas on caves or abandoned mines. Some parks have also used the funding to produce educational programs and signs about the importance of bats and the threat of WNS.

WNS and Human Health

The NPS Office of Public Health has issued the following statement on WNS:

Current evidence indicates that WNS is not transmissible from bats to humans. Studies have shown that the fungus grows only at cold temperatures (41-68 degrees F) that are much lower than that of the human body. Also, no human infections have ever been documented after exposure to WNS-infected bats or caves.

Although WNS does not cause illness in humans, a small percentage of bats can be infected with other dangerous diseases such as rabies. Bats infected with either WNS or rabies may exhibit unusual behavior (e.g. erratic flying), which increases the risk for bat-human contact and exposure. Additionally, declines in bat populations can impact human health indirectly since humans depend on bats for important ecosystem services such as crop pollination and controlling pest insects.



OneHealth

Parks/Regions/Networks That Received Funding for Research on White-Nose Syndrome, FY2015-2016

Acadia National Park
Alaska Regional Office
Blue Ridge Parkway
Buffalo National River
Cape Cod National Seashore
Carlsbad Caverns National Park
Chickamauga & Chattanooga National Military Park
Cumberland Gap National Historical Park
Delaware Water Gap National Recreation Area
Devil's Tower National Monument
Effigy Mounds National Monument
Fire Island National Seashore
Glacier National Park
Glen Canyon National Recreation Area
Grand Canyon National Park
Grand Teton National Park
Great Basin National Park
Great Lakes I & M Network
Great Smoky Mountains National Park
Hot Springs National Park
Jewel Cave National Monument
Keweenaw National Historical Park
Lava Beds National Monument
Mammoth Cave National Park
Marsh-Billings-Rockefeller National Historical Park
National Capital Parks—East
Northern Great Plains I & M Network
Organ Pipe Cactus National Monument
Ozark National Scenic Riverways
Pictured Rocks National Lakeshore
Shenandoah National Park
Upper Columbia Basin I & M Network
Wind Cave National Park
Yellowstone National Park

More Information

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